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which its second end is fastened, said place being situated on the pre-cocking mechanism on its side facing the first limb.

In a preferred embodiment said bow limbs are provided at their both ends with recesses in which the pulleys are fixed and through which the bowstring runs.

Preferably the recesses are triangular with vertices directed towards the middle of the limbs,.

In a preferred embodiment of the bow of the invention the pre-cocking mechanism is positioned centrally between the limbs, and has a body with a longitudinal slotted guide for a draw pin, said guide passing through said body in the direction of the limbs, and the ends of the bowstring are fastened on the sides of the body to the ends of the draw pin from where the bowstring runs to the front pulleys of the limbs, through a notch on the top of the body adjacent to a threaded hole for a draw screw connected with the draw pin.

Preferably the slotted guide and the threaded hole for the draw screw are situated diagonally in relation to the longitudinal axis of the body.

Another aspect of the invention provides a trigger mechanism for a crossbow having a case containing a nut in the form of a cylinder with a cut-out for the bowstring and an indentation located oppositely to said cut-out and accommodating a first ball from a set of at least two locking balls positioned one on the top of the other in the case, wherein the nut is connected with an stopper which abuts a spring-loaded retainer for said stopper, and the set of locking balls includes a working ball which on its one side is co-axially adjacent to a pusher connected with a trigger, and on its opposite side is adjacent to a working element of a counterrecoil mechanism, said working element being loaded with a recoil spring.

In a preferred embodiment of the invention the trigger mechanism has the working element in the form of a ball.

Another aspect of the invention provides a crossbow having a cocking mechanism and a bow with pulleys for a bowstring, said bow being mounted on a tiller including a projectile guide and provided with an aiming mechanism and a trigger mechanism, characterized by having the above defined tiller of the invention as its tiller and/or the above defined bow of the invention as its bow, and/or the above defined trigger mechanism of the invention as its trigger mechanism.

It is to be understood that the crossbow of the invention can be assembled by combining any suitable conventional bow and any suitable conventional trigger mechanism with the tiller of the invention; or by combining any suitable conventional tiller and any suitable conventional trigger mechanism with the bow of the invention; or by combining any suitable conventional tiller and any suitable conventional bow with the trigger mechanism of the invention; or by

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7. A trigger mechanism for a crossbow **characterized in that** it has a case (27) containing a nut (28) in the form of a cylinder with a cut-out (29) for the bowstring (20) and an indentation (30) located oppositely to said cut-out (29) and accommodating a first ball (31) from a set of at least two locking balls (31) positioned one on the top of the other in the case (27), wherein the nut (28) is connected with an stopper (32) which abuts a spring-loaded retainer (33) for said stopper (32), and the set of locking balls (31) includes a working ball (34) which on its one side is co-axially adjacent to a pusher (35) connected with a trigger (36), and on its opposite side is adjacent to a working element (37) of a counterrecoil mechanism, said working element (37) being loaded with a recoil spring (38).

8. A trigger mechanism for a crossbow according to Claim 7, **characterized in that** the working element (37) is in the form of a ball.

9. A crossbow having a cocking mechanism and a bow with pulleys for a bowstring, said bow being mounted on a tiller including a projectile guide and provided with an aiming mechanism and a trigger mechanism, **characterized in that** said tiller for a crossbow has a cocking lever in the form of an upper arm (1) and a lower arm (2) pivotally connected with each other about an axis (X) in the front part of the tiller, whereas in the rear part of the tiller said upper arm (1) is connected with the upper end of a butt (5), and said lower arm (2) is connected with the lower end of the butt (5) in the folded state of the tiller by means of a snap fastener (6).

10. A crossbow having a cocking mechanism and a bow with pulleys for a bowstring, said bow being mounted on a tiller including a projectile guide and provided with an aiming mechanism and a trigger mechanism, **characterized in that** said bow for a crossbow has two limbs (13, 14), the first limb (13) having on its respective ends a front pulley (15a) and a back pulley (16a), and a second limb (14) having on its respective ends a front pulley (15b) and a back pulley (16b), said limbs (13, 14) being pivotally connected by means of bolts (17a, 17b) with a central cross-bar (18) carrying a pre-cocking mechanism (19) to which a bowstring (20) is fastened, wherein the first end of the bowstring (20) is fastened to the pre-cocking mechanism (19) on its side facing the second limb (14), from where the bowstring (20) runs to the front pulley (15a) of the first limb (13) and then, along the diagonal of the bow (12), to the back pulley (16b) of the second limb (14), and then to the back pulley (16a) of the first limb (13) from where it runs, along the diagonal of the bow (12), to the front pulley (15b) of the second limb (14) and then to the place at which its second end is fastened, said place being situated on the pre-cocking mechanism (19) on its side facing the first limb (13).

11. A crossbow according to Claim 10, **characterized by that** said limbs (13, 14) are provided at their both ends with recesses (21) in which the pulleys (15a, 15b, 16a, 16b) are fixed

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and through which the bowstring (20) runs.

12. A crossbow according to Claim 11, **characterized by that** the recesses (32) are triangular with vertices directed towards the middle of the limbs (13, 14).

13. A crossbow according to Claim 11 **characterized in that** the pre-cocking mechanism (19) is positioned centrally between the limbs (13, 14) and has a body (22) with a longitudinal slotted guide (23) for a draw pin (24), said guide (23) passing through said body (22) in the direction of the limbs (13, 14), and the ends of the bowstring (20) are fastened on the sides of the body (22) to the ends of the draw pin (24) from where the bowstring (20) runs to the front pulleys (15a, 16a) of the limbs (13, 14) through a notch (25) on the top of the body (22) adjacent to a threaded hole for a draw screw (26) connected with the draw pin (24).

14. A crossbow according to Claim 13, **characterized in that** the slotted guide (23) and the threaded hole for the draw screw (26) are situated diagonally in relation to the longitudinal axis of the body (22).

15. A crossbow having a cocking mechanism and a bow with pulleys for a bowstring, said bow being mounted on a tiller including a projectile guide and provided with an aiming mechanism and a trigger mechanism, **characterized in that** said trigger mechanism has a case (27) containing a nut (28) in the form of a cylinder with a cut-out (29) for the bowstring (20) and an indentation (30) located oppositely to said cut-out (29) and accommodating a first ball (31) from a set of at least two locking balls (31) positioned one on the top of the other in the case (27), wherein the nut (28) is connected with an stopper (32) which abuts a spring-loaded retainer (33) for said stopper (32), and the set of locking balls (31) includes a working ball (34) which on its one side is co-axially adjacent to a pusher (35) connected with a trigger (36), and on its opposite side is adjacent to a working element (37) of a counterrecoil mechanism, said working element (37) being loaded with a recoil spring (38).

16. A crossbow according to Claim 15 **characterized in that** the working element (37) is in the form of a ball.

17. A crossbow having a cocking mechanism and a bow with pulleys for a bowstring, said bow being mounted on a tiller including a projectile guide and provided with an aiming mechanism and a trigger mechanism, **characterized in that** the tiller of said crossbow has a cocking lever in the form of an upper arm (1) and a lower arm (2) pivotally connected with each other about an axis (X) in the front part of the tiller, whereas in the rear part of the tiller said upper arm (1) is connected with the upper end of a butt (5), and said lower arm (2) is connected with the lower end of the butt (5) in the folded state of the tiller by means of a snap fastener (6); and the bow of said crossbow has two limbs (13, 14), the first limb (13) having on its respective

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ends a front pulley (15a) and a back pulley (16a), and a second limb (14) having on its respective ends a front pulley (15b) and a back pulley (16b), said limbs (13, 14) being pivotally connected by means of bolts (17a, 17b) with a central cross-bar (18) carrying a pre-cocking mechanism (19) to which a bowstring (20) is fastened, wherein the first end of the bowstring (20) is fastened to the pre-cocking mechanism (19) on its side facing the second limb (14), from where the bowstring (20) runs to the front pulley (15a) of the first limb (13) and then, along the diagonal of the bow (12), to the back pulley (16b) of the second limb (14), and then to the back pulley (16a) of the first limb (13) from where it runs, along the diagonal of the bow (12), to the front pulley (15b) of the second limb (14) and then to the place at which its second end is fastened, said place being situated on the pre-cocking mechanism (19) on its side facing the first limb (13).

18. A crossbow according to Claim 17 **characterized in that** said limbs (13, 14) are provided at their both ends with recesses (21) in which the pulleys (15a, 15b, 16a, 16b) are fixed and through which the bowstring (20) runs.

19. A crossbow according to Claim 17, **characterized in that** the recesses (32) are triangular with vertices directed towards the middle of the limbs (13, 14).

20. A crossbow according to Claim 17, **characterized in that** the pre-cocking mechanism (19) is positioned centrally between the limbs (13, 14) and has a body (22) with a longitudinal slotted guide (23) for a draw pin (24), said guide (23) passing through said body (22) in the direction of the limbs (13, 14), and the ends of the bowstring (20) are fastened on the sides of the body (22) to the ends of the draw pin (24) from where the bowstring (20) runs to the front pulleys (15a, 16a) of the limbs (13, 14) through a notch (25) on the top of the body (22) adjacent to a threaded hole for a draw screw (26) connected with the draw pin (24).

21. A crossbow according to Claim 20 **characterized in that** the slotted guide (23) and the threaded hole for the draw screw (26) are situated diagonally in relation to the longitudinal axis of the body (22).

22. A crossbow having a cocking mechanism and a bow with pulleys for a bowstring, said bow being mounted on a tiller including a projectile guide and provided with an aiming mechanism and a trigger mechanism, **characterized in that** the tiller of said crossbow has a cocking lever in the form of an upper arm (1) and a lower arm (2) pivotally connected with each other about an axis (X) in the front part of the tiller, whereas in the rear part of the tiller said upper arm (1) is connected with the upper end of a butt (5), and said lower arm (2) is connected with the lower end of the butt (5) in the folded state of the tiller by means of a snap fastener (6); and the trigger mechanism (8) of said crossbow has a case (27) containing a nut (28) in the form of a cylinder with a cut-out (29) for the bowstring (20) and an indentation (30) located oppositely

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to said cut-out (29) and accommodating a first ball (31) from a set of at least two locking balls (31) positioned one on the top of the other in the case (27), wherein the nut (28) is connected with an stopper (32) which abuts a spring-loaded retainer (33) for said stopper (32), and the set of locking balls (31) includes a working ball (34) which on its one side is co-axially adjacent to a pusher (35) connected with a trigger (36), and on its opposite side is adjacent to a working element (37) of a counterrecoil mechanism, said working element (37) being loaded with a recoil spring (38).

23. A crossbow according to Claim 22, **characterized in that** the working element (37) of the trigger mechanism (8) is in the form of a ball.

24. A crossbow having a cocking mechanism and a bow with pulleys for a bowstring, said bow being mounted on a tiller including a projectile guide and provided with an aiming mechanism and a trigger mechanism, **characterized in that** the bow (12) of said crossbow has two limbs (13, 14), the first limb (13) having on its respective ends a front pulley (15a) and a back pulley (16a), and a second limb (14) having on its respective ends a front pulley (15b) and a back pulley (16b), said limbs (13, 14) being pivotally connected by means of bolts (17a, 17b) with a central cross-bar (18) carrying a pre-cocking mechanism (19) to which a bowstring (20) is fastened, wherein the first end of the bowstring (20) is fastened to the pre-cocking mechanism (19) on its side facing the second limb (14), from where the bowstring (20) runs to the front pulley (15a) of the first limb (13) and then, along the diagonal of the bow (12), to the back pulley (16b) of the second limb (14), and then to the back pulley (16a) of the first limb (13) from where it runs, along the diagonal of the bow (12), to the front pulley (15b) of the second limb (14) and then to the place at which its second end is fastened, said place being situated on the pre-cocking mechanism (19) on its side facing the first limb (13); and the trigger mechanism of said crossbow has a case (27) containing a nut (28) in the form of a cylinder with a cut-out (29) for the bowstring (20) and an indentation (30) located oppositely to said cut-out (29) and accommodating a first ball (31) from a set of at least two locking balls (31) positioned one on the top of the other in the case (27), wherein the nut (28) is connected with an stopper (32) which abuts a spring-loaded retainer (33) for said stopper (32), and the set of locking balls (31) includes a working ball (34) which on its one side is co-axially adjacent to a pusher (35) connected with a trigger (36), and on its opposite side is adjacent to a working element (37) of a counterrecoil mechanism, said working element (37) being loaded with a recoil spring (38).

25. A crossbow according to Claim 24, **characterized in that** said limbs (13, 14) of the bow (12) are provided at their both ends with recesses (21) in which the pulleys (15a, 15b, 16a, 16b) are fixed and through which the bowstring (20) runs

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26. A crossbow according to Claim 25, **characterized in that** the recesses (32) are triangular with vertices directed towards the middle of the limbs (13, 14).

27. A crossbow according to Claim 24, **characterized in that** in the bow (12) the pre-cocking mechanism (19) is positioned centrally between the limbs (13, 14) and has a body (22) with a longitudinal slotted guide (23) for a draw pin (24), said guide (23) passing through said body (22) in the direction of the limbs (13, 14), and the ends of the bowstring (20) are fastened on the sides of the body (22) to the ends of the draw pin (24) from where the bowstring (20) runs to the front pulleys (15a, 16a) of the limbs (13, 14) through a notch (25) on the top of the body (22) adjacent to a threaded hole for a draw screw (26) connected with the draw pin (24).

28. A crossbow according to Claim 27, **characterized in that** the slotted guide (23) and the threaded hole for the draw screw (26) are situated diagonally in relation to the longitudinal axis of the body (22).

29. A crossbow according to Claim 24, **characterized in that** in the trigger mechanism (8) the working element (37) of the counterrecoil mechanism is in the form of a ball.

30. A crossbow having a cocking mechanism and a bow with pulleys for a bowstring, said bow being mounted on a tiller including a projectile guide and provided with an aiming mechanism and a trigger mechanism, **characterized in that** the tiller of said crossbow has a cocking lever in the form of an upper arm (1) and a lower arm (2) pivotally connected with each other about an axis (X) in the front part of the tiller, whereas in the rear part of the tiller said upper arm (1) is connected with the upper end of a butt (5), and said lower arm (2) is connected with the lower end of the butt (5) in the folded state of the tiller by means of a snap fastener (6); the bow of said crossbow has two limbs (13, 14), the first limb (13) having on its respective ends a front pulley (15a) and a back pulley (16a), and a second limb (14) having on its respective ends a front pulley (15b) and a back pulley (16b), said limbs (13, 14) being pivotally connected by means of bolts (17a, 17b) with a central cross-bar (18) carrying a pre-cocking mechanism (19) to which a bowstring (20) is fastened, wherein the first end of the bowstring (20) is fastened to the pre-cocking mechanism (19) on its side facing the second limb (14), from where the bowstring (20) runs to the front pulley (15a) of the first limb (13) and then, along the diagonal of the bow (12), to the back pulley (16b) of the second limb (14), and then to the back pulley (16a) of the first limb (13) from where it runs, along the diagonal of the bow (12), to the front pulley (15b) of the second limb (14) and then to the place at which its second end is fastened, said place being situated on the pre-cocking mechanism (19) on its side facing the first limb (13); and the trigger mechanism of said crossbow has a case (27) containing a nut (28) in the form of a cylinder with a cut-out (29) for the bowstring (20) and an indentation (30) located oppositely to said cut-out

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(29) and accommodating a first ball (31) from a set of at least two locking balls (31) positioned one on the top of the other in the case (27), wherein the nut (28) is connected with an stopper (32) which abuts a spring-loaded retainer (33) for said stopper (32), and the set of locking balls (31) includes a working ball (34) which on its one side is co-axially adjacent to a pusher (35) connected with a trigger (36), and on its opposite side is adjacent to a working element (37) of a counterrecoil mechanism, said working element (37) being loaded with a recoil spring (38).

31. A crossbow according to Claim 30, **characterized in that** said limbs (13, 14) of the bow (12) are provided at their both ends with recesses (21) in which the pulleys (15a, 15b, 16a, 16b) are fixed and through which the bowstring (20) runs

32. A crossbow according to Claim 31, **characterized in that** the recesses (32) are triangular with vertices directed towards the middle of the limbs (13, 14).

33. A crossbow according to Claim 30, **characterized in that** in the bow (12) the pre-cocking mechanism (19) is positioned centrally between the limbs (13, 14) and has a body (22) with a longitudinal slotted guide (23) for a draw pin (24), said guide (23) passing through said body (22) in the direction of the limbs (13, 14), and the ends of the bowstring (20) are fastened on the sides of the body (22) to the ends of the draw pin (24) from where the bowstring (20) runs to the front pulleys (15a, 16a) of the limbs (13, 14) through a notch (25) on the top of the body (22) adjacent to a threaded hole for a draw screw (26) connected with the draw pin (24).

34. A crossbow according to Claim 33, **characterized in that** the slotted guide (23) and the threaded hole for the draw screw (26) are situated diagonally in relation to the longitudinal axis of the body (22).

35. A crossbow according to Claim 30, **characterized in that** in the trigger mechanism (8) the working element (37) of the counterrecoil mechanism is in the form of a ball.